

## Ulnar Sensory (Antidromic)

### *Electromyograph Instrument Parameters:*

Filter Settings/Frequency Response: 20 Hz - 2,000 Hz  
Sweep Speed: 1 - 2 milliseconds/Division  
Sensitivity/Gain: 5 - 20 microvolts/Division

**Patient Position:** (Illustration 8) The patient is positioned supine with arm abducted approximately 45 degrees. The forearm is supinated, palm up, the wrist is in a neutral position and the fingers are slightly flexed in a relaxed, "resting" position.

### *Electrode Placement:* (Illustration 8)

**Active (Recording) Electrode:** The active recording electrode is attached to the little finger at the midpoint of the proximal phalanx of the little finger so that a distance of not less than 10 cm, but not more than 14 cm is maintained between the stimulating electrode and the active electrode.

**Reference Electrode:** The reference electrode is positioned at or about the distal interphalangeal joint line of the little finger so that a distance of not less than 3 cm is maintained between the active and reference electrode.

**Ground Electrode:** The ground should be positioned on the dorsum of the hand between the active and stimulating electrodes.

### *Electrostimulation:* (Illustration 8)

Percutaneous electrostimulation is performed as follows:

Stimulation is performed at the wrist, medial or lateral to the flexor carpi ulnaris tendon.

### **TECHNICAL COMMENTS:**

A low electrostimulation intensity is usually adequate to elicit the antidromic sensory response.

Motor response and volume conduction effects may be lessened by decreasing electrostimulation intensity and/or decreasing pulse width duration of the applied electrostimulation. (NOTE: Motor responses from hand muscles and volume conduction are more of a technical problem when utilizing antidromic techniques than when using orthodromic techniques.)

**Special Concern:** Care must be taken to maintain a separation between the active and reference electrodes on the little (5th) finger. Do not allow conducting gel to bridge this interelectrode space.

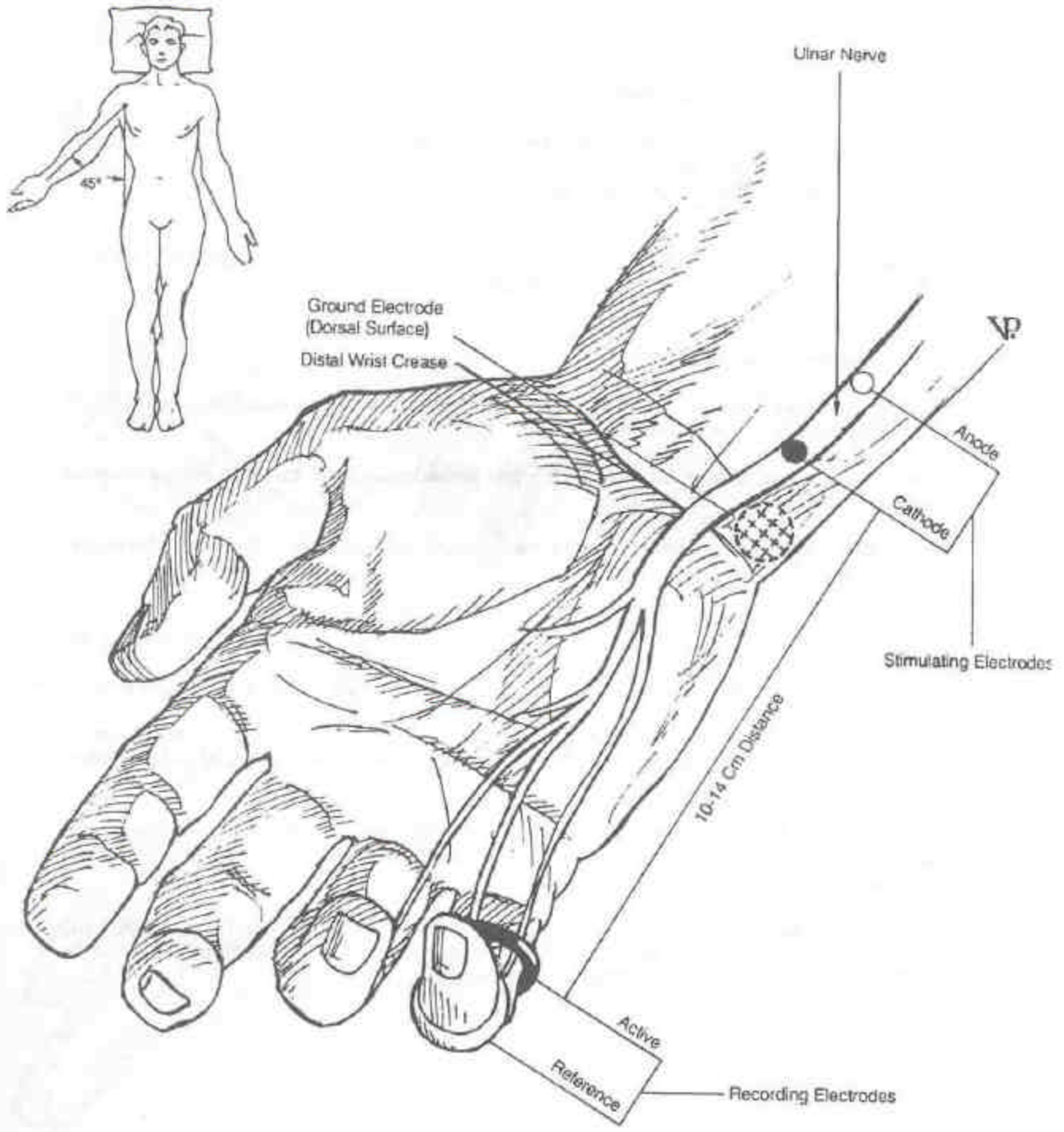


ILLUSTRATION 8